UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JULY 26, 1995

MEMORANDUM

SUBJECT: Environmental Indicator Fact Sheet

FROM: Susan Parker,

Corrective Action Programs Branch (5303W)

TO: Regional Corrective Action Contacts

Attached for your information is a fact sheet containing additional guidance on the two Environmental Indicators that were added to RCRIS last year. As you are all aware, the corrective action program has spent a great deal of effort over the last few years developing indicators that will measure the environmental results of remedial activities. Several questions have been raised regarding the definitions and guidance in the process of applying them to specific facilities. Region IV, in particular, sent a list of questions to Headquarters on the Environmental Indicators. Since everyone is in the beginning stages of evaluating facilities and may have similar questions, we decided to develop the enclosed fact sheet based on Region IV's questions. Please share this information with your states to insure that the definitions and guidance are interpreted consistently across the country.

The fact sheet is currently a draft document. If there are additional questions you would like to see added, or if you disagree with the answers, please let me know and I will revise the fact sheet. My phone number is 703-308-8653 or you can send me a written list of comments. In addition, if you have developed guidance for your Regional which other Regions could use, please send me a copy and I will make sure it is distributed. Finally, I would like to thank Region 4 for their help in developing this fact sheet.

Attachment

CORRECTIVE ACTION ENVIRONMENTAL INDICATORS Ouestion & Answer Fact Sheet - 5/8/95

DRAFT

- Q) The FY95 and FY96 RCRA Implementation Plans give different goals for evaluating facilities currently in the pipeline for the Environmental Indicators (EI). Which presentation is correct? What constitutes the pipeline?
- A) The goal stated in the FY96 RIP is Correct all facilities currently in the pipeline should be evaluated for EI by the end of FY97. Therefore, all facilities with corrective action ongoing should be evaluated to determine if they have achieved the EI definitions. This does not mean all of these facilities have to meet the definitions by the end of FY97, just that the Regions or States should evaluate them. Regions and States are welcome to evaluate additional facilities if they choose. We set the goal against the facilities already in the corrective action process because those facilities will have the most information. Facilities should be evaluated as soon as there is enough information to make the determinations.
- Q) The July 29, 1994 RCRIS Corrective Action Environmental Indicator Event Codes Guidance (1994 guidance) mentions that these two new event codes are applicable to facilities subject to "RCRA Corrective Action." How do the event codes relate to corrective action taken under the base RCRA Program? Since the codes are for the entire facility, it would seem that there should be no distinction between HSWA and base RCRA corrective action. For example, what would happen to a facility which only had groundwater contamination and that contamination was contained onsite by the base RCRA Program (e.g. post-closure permit), but the HSWA Permit did not contain any SWMUs requiring investigation or remediation? Are base RCRA actions (e.g. closure action, post-closure actions) to be included in evaluating facilities for these two new event codes?
- A) If corrective action is occurring at a regulated unit (RU), then it is appropriate for the facility to be evaluated for EI. In many cases corrective action is occurring at both RUs and SWMUs and it does not make sense to distinguish between the two, especially since the EI are facility-wide indicators. However, there may also be cases where a facility only has a RU which does not have a release. In this case, the EI determinations of NC or NR can be used, although tracking base program-only actions is not required.

- Q) The 1994 guidance uses action levels in determining contamination in both event codes. Is the use of the term "action levels" in the guidance suggesting action levels as calculated pursuant to the 1990 Proposed Subpart S rule or is the guidance suggesting tile concept of trigger values such as the Soil Screening levels?
- A) As part of the Subpart S rulemaking effort, the Agency is currently evaluating the issues associated with action levels, including the use of the Superfund Soil Screening Levels for RCRA corrective action. In the case of the EI guidance, "action levels" refer to the specific trigger values established by the Agency or State which apply to the facility.
- Q) Why does the FY95 RIP state that the EI event codes do not apply to facilities where there is no contamination but the 1994 guidance document has status codes specifically designed to track cases where there is no contamination or contamination is below action levels/established cleanup levels?
- A) The EI definitions were originally intended only to address facilities where contamination was present at levels which would require remediation. The Agency decided to expand the definitions to include those facilities where the problem addressed by each EI event (human exposure or groundwater releases) did not exist. The status code that tracks this situation was added after the FY95 RIP was finalized. The 1994 guidance document was finalized after the FY95 RIP and contains the latest guidance on the new status codes. Facilities meet the EI definitions if there is no human exposure to contamination (CA725) or there are no groundwater releases (CA750).
- Q) Currently, the definition of CA750 includes two criteria that must be fulfilled before entering CA750. Both criteria relate to a release of contamination (i.e., a release above action levels). On page 10 of the 1994 guidance, it is stated that CA750 NR is designed for cases where there is "no release of contamination to groundwater at the facility." Does the definition of no release mean no contaminant levels above action levels?
- A) Yes. The intent of the NR status code is to indicate that the facility does not have a groundwater problem needing remediation. If the contaminant levels are below action levels or Agency-specified cleanup levels, then groundwater remediation will not be required and the facility meets the EI definition.
- Q) The 1994 guidance on page 4 states that "blank spaces or no entries should only be interpreted to mean that the human health risks resulting from a release have not yet been determined at a facility, not that the facility has uncontrolled risks." Why isn't there a status code to indicate when a facility has been evaluated but does not meet the EI definitions?

- A) The EI definitions were designed to measures of success not just to document whether a facility has been evaluated. The sentence referred to above was added to the guidance to preclude people from jumping to the conclusion that every facility with a blank space automatically meant there were uncontrolled exposures or releases. This precaution is particularly important for these first few years of having the EI because not every facility has been evaluated. Once most of the facilities have been evaluated, we will revise that part of the guidance.
- Q) Are the Regions to include on-site workers as part of their evaluations for Environmental Indicators?
- A) Risks to on-site workers should not be ignored in this process, however, a risk assessment is not required to make this determination. As long as the facility has Health and Safety Plans assuring that if workers are in a contaminated area they wear appropriate clothing and equipment, or if bottled water is supplied, the determination can be made.
- Q) Under CA750, the 1994 guidance document mentions that actual field measurements must provide evidence to support the releases controlled determination. Considering the fact that these two new event codes are to be dynamic representations of what is occurring at the facility (i.e., they can change as knowledge or conceptual understanding of the facility changes), how should the Regions address cases where monitoring data is inconclusive in determining whether or not the groundwater control measure is effective?
- **A)** The EI determinations are subjective decisions that need to be supported by data. If the data are inconclusive, than there is no basis for a positive determination.
- Q) One of the examples in the 1994 guidance focuses on the owner/operator of the facility insuring that private citizens will not use the wells (e.g., wells are sealed). Another example uses prevention of installation of drinking water wells in areas overlying the groundwater contaminant plume to insure that there is no exposure. Is it appropriate for the Agency or state to require owner/operators to be responsible for the actions of private citizens?
- A) The definition of CA725 is that human exposures have been controlled. In order to claim this event, a facility must have addressed the obvious routes where exposure is actually occurring. One of the key features of the Environmental Indicators is that they are focused on actual exposures rather than potential exposures. If the facility takes steps to ensure that people are not being exposed, then the definition is met. In some cases providing an alternative water supply and explicit warnings may be enough. In other cases, wells may need to be sealed to prevent exposure. In terms of the second example where drinking water wells are prevented from being installed, the Agency's intent was to have the facilities make public/local officials who would approve the installation of new wells aware of the problem and thus insure that additional wells are not added to the area.

- **Q)** For CA725, are control measures necessary for off-site releases even if there are no actual human exposures occurring?
- **A)** The guidance indicates that if there is an off-site release, active control measures must be in place (e.g., access controls, physical barriers, or institutional controls) before CA725/YE can be entered
- **Q**) How should EI determinations be handled under state-analogous actions?
- A) Reporting state analogous actions is optional. The Agency recognizes that it may not be possible to obtain this information from states or state agencies that are not directly connected to the authorized RCRA program. However, there are Regions and States that have a close working relationship with non-HSWA state programs. If the information is available, Regions/authorized states are highly encouraged to enter EI data. Regions may also decide that a state program evaluation such as the one performed by Region IX is a valuable use of resources for their program. In either case, the Region or authorized state must have enough knowledge about the state program or the site specific decisions to state that the action is analogous to a HSWA action.

Data Entry Note

The 1994 guidance document stated that EI events could be entered either as legitimate orphans or as specific areas labeled "entire facility." Unfortunately, the latter option will not work for national reporting. Instead, EI events must continue to be entered as legitimate orphans or they must be linked to every area at the facility.